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EDITORIAL NOTICE.

The news issues of the Street Railway Journal are devoted primarily to the publication of street railway news and current happenings related to street railway interests. All information regarding changes of officers, new equipments, extensions, financial changes and new enterprises will be greatly appreciated for use in its columns.

All matter intended for publication must be received at our office not later than Wednesday morning of each week, in order to sccure insertion in the current issue.

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Antiquated Horse Cars in Cleveland Parade

As a feature of the Republican parade at Cleveland, Nov. 3, the Cleveland Electric Railway Company resurrected two horse cars which had not been in use for many years and placed them in operation on Euclid Avenue between the Public Square and Erie Street. Banners on the cars said: "Style of 1860. Think and Thank." Through the daily papers the public were invited to "Come and have an old-time ride. No fares collected.". The cars were operated by four men who had been in the company's employ for nearly twenty years.

Three=Cent Fare Suit in Massachusetts

The city of Worcester, Mass., has instituted suit against the Worcester Consolidated Street Railway Company for refusing to issue 3-cent fare tickets to school children, and carry them at that rate as stipulated in the recent act of the Legislature. The law specifies that all school children shall be carried for one-half the regular fare, and that tickets shall be sold them in books of ten. The penalty fixed in the statute for failure to comply with the law is a fine of \$25 in each case. This suit will be followed with great interest, as it is really instituted to test the constitutionality of the act.

Comments of a Daily Newspaper on Trolley Accidents

The Boston Herald appears to be one of the very few newspapers —and they are very few—which realize what the management of a street railway property means, and the comments in its issue of Nov. 3, which are very timely, are given below:

"Two cases in one day of trolley cars being uncontrollable serves to show that accidents in this means of transportation are always possible. On the whole, considering the great number of these vehicles employed on the city streets and the suburban roads, the number of serious accidents reported is few, and this way of locomotion must be considered remarkably safe. It is apparent that safety depends all the time on the proper working of the machinery, and on the skill and attention of the motormen in charge. Doubtless there are many cases of the failure of brakes to work as they should, of which nothing is known by the public at large, because no consequences follow that require the attention of reporters. There are also narrow escapes due to the carelessness of operators of which no mention is ever made. But when a car runs into a draw, or dashes upon the sidewalk, or has a collision that results in injuries, the facts come to the knowledge of the public. It is vain to expect that all such accidents can be eliminated from experience. Yet, when all is said, the general safety of the trolley system is a matter of gratification and of admiration as well."

Connecticut's Annual Railway Report

The annual report of the Railroad Commissioners regarding the condition of the street railways of Connecticut has just been made public. The report is, from every point of view, a satisfactory one, and shows more remarkable gains than last year throughout the State.

The companies making the largest returns in order of size are: Hartford Street Railroad Company, Fair Haven & Westville, Bridgeport Traction, Connecticut Lighting & Power Company (Waterbury district) and Winchester Avenue. The greatest number of passengers carried per mile, showing the most heavily patronized roads, are the Montville Street Railroad Company, 7.68 passengers per mile; Norwich Street, 5.98; Danbury & Bethel, 5.85; Derby Street, 5.71; New London Street, 5.48; Winchester Avenue, 5.16. During the year there were 39 people killed by the electric roads and 178 injured, against 12 last year killed and 312 injured. The year has, therefore, been freer by 134 in accidents and has increased 27 in deaths. During the year there has been an increase of but 4 miles in new trackage in the State up to June 30. Stock issues have decreased \$600,000; bond issues decreased \$10,000; cost of construction decreased \$600,000; cost of equipment fallen off, \$10,000; gross earnings increased, \$257,000; operating expenses, \$100,000; net earnings, \$143,000; dividends have decreased \$21,000; interest has increased, \$3,000; taxes have increased \$24,000; miles run increased 1300; passengers carried increased 5000; the average passengers per mile run have decreased from 4.05 to 4.02; number of employees decreased, 365.

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Mr. Louderbach as Mr. Yerkes' Representative

D. H. Louderbach, of Chicago, is now en route to London to take charge of the Charing Cross, Euston & Hampstead Railroad, in which C. T. Yerkes and other American capitalists are interested. He will be the personal London representative of the American syndicate, and will assume the direction of the work immediately on his arrival. Mr. Louderbach was in London with Mr. Yerkes when the deal was completed, and has been associated with Mr. Yerkes in his Chicago enterprises. He supervised the erection of the Union Loop, and also had charge of many of the outlying suburban lines now merged into the Consolidated Traction Company.

No Third Track for Lake Street "L"

The following paragraph appeared in a recent issue of a Chicago daily newspaper, and also found its way by special telegraph into many of the important dailies in the principal cities: "The Lake Street Elevated road is planning to build a third track in connection with its system and will open an express service similar to that in vogue on the Northwestern line. Express trains will be run downtown in the morning from the outlying stations, and from the city to the western terminus during the rush hours of the evening. By this means accommodations can be provided for patrons in the busiest hours." Such news as this naturally caused much talk in engineering circles. A representative of the STREET RAILWAY JOURNAL called on Mr. Abel, president of the company, and he emphatically denied that the company was considering any such move.

Trolleys Crash in Montreal

A score or more people were injured in a collision which occured on Cote des Neiges hill, Montreal, on Nov. 3. There was a pilgrimage to the Cote des Neiges Cemetery on this date, which was attended by several thousands, and as a car, loaded to its full capacity, was ascending the hill, the trolley slipped off. The motorman applied the brakes, but the car slid backward slowly. There was a panic among the people inside the car, and they made a rush for the front vestibule. So many crowded in that the motorman was rendered powerless to do anything further. They broke the vestibule windows, the windows of the cars, and jumped from the rear platform. The car, gathering speed, dashed into a car following and that one crashed into another, before all were finally brought to a standstill.

Chicago Commission Prepares Bills to be Presented to the Legislature

The Chicago Street Railway Commission has practically completed its report to be presented to the Council, and the bills to be presented to the Legislature. It is planned to present two bills to the Legislature, and, before they are finally ready for presentation, they will be presented to the city's legal experts for their opinion. The first measure will be one conferring upon the city authorities the specific right to own and operate street railways. Under its provisions the city will be empowered to negotiate for the purchase of the present street railway plants within the city limits, or, as an alternative, to build an entirely new system. The money for thus purchasing or building street railways to be owned by the municipality is to be raised by the issuance of bonds within specified limits. Before such bonds can be issued the question must be submitted to a vote of the people. The second measure provides for municipal ownership of a comprehensive system of downtown subways. It has the same provisions as the other bill as regards the financing of the subway system. It confers authority upon the municipality to build the subway system on a bond issue, and, like the other bill, makes an affirmative popular vote necessary before such bonded debt can be incurred. The net result of the municipal street railway commission's labor is thus the adoption of the principle of municipal ownership, and at the same time the adoption of the referendum principle.

New Superintendent in Denver

The directors of the Denver Consolidated Tramway Company have appointed Simeon W. Cantril superintendent, to succeed C. K. Durbin, resigned. The appointment comes in the way of a promotion, as Mr. Cantril has been superintendent of the South and West divisions of the tramway system since December last. Although still a young man Mr. Cantril is an old resident of Denver, and has held such positions that he possesses an unusually extended acquaintance in the city. He first became known to the public as chief deputy United States marshal in Denver, in which capacity he served eight years. Later he was chief deputy in the Assessor's office, after which he was connected with the Denver Gas Company for four years. At the end of that period he had his first experience in street railway work as assistant to the superintendent of the Denver Cable Railway, and in December last he became connected with the Denver Tramway as division superintendent.

The Relative Advantages of Narrow and Standard Gages for Electric Roads *

BY F. GUNDERLOCH, MANAGER OF THE BAHN GESELLSCHAFT

This report considers the following question: What are the relative advantages and disadvantages of narrow gage and standard gage for electric street railways, especially in regard to the mounting of sufficiently heavy motors and other mechanical appliances?

On account of the greater efficiency of electric motor cats, the strictly city street car lines have been extended into suburban districts, which naturally present new problems for solution. One of these is the demand for higher speed and the accompanying necessity for heavier and stronger cars. The greatly varying traffic further made it necessary, at certain hours, to run trains consisting of a number of cars. The motor cars must possess sufficient weight for traction and be equipped with motors which can furnish the requisite draw-bar pull. In general, care must be taken in projecting an electric road so to build it that it can extend in the future, and new requirements be met without difficulty.

An important role in this connection is played by the choice of the right gage. As gages of less than I m are seldom met with, this paper only compares the meter gage with the standard gage. Only eleven companies sent replies to the above question, and from these the following general conclusions have been drawn:

I. The narrow gage permits an easy rounding of sharp curves. With the present types of motor cars, with a wheel base of from 1.6 m to 2 m, this advantage is not a very important one. It has been found that of sixty-one electric roads having curves of 20-m radius or less, thirty-three employ the standard gage and only twenty-eight the meter gage. This shows that the occurrence of a few sharp curves should not be sufficient cause to induce railway companies to adopt the narrow gage.

2. There is less expense connected with the construction and maintenance 6f a narrow gage than standard gage. This, of course, only becomes of importance where the company builds its own roadbed, and where the same is of considerable length. The narrow gage requires a smaller expenditure for roadways, the transportation of earth and general construction.

3. As the electric roads are feeling more and more the competition with steam roads, especially in the transportation of freight, it is to their advantage to use the standard gage, as it enables the electric freight cars to traverse the tracks of the steam road, thus saving the cost of unloading and vice versa. To permit this the following conditions, however, must be observed in the building of the street car line:

(a) There must be no curves of a radius less than 150 m.

(b) The rails must be so supported that they can resist at any point a moving load of 6000 kg at a speed of 30 km per hour.

(c) There must be a clear space above the track of 760 mm.

(d) The track axes must be 4 m apart.

(c) There must be no grades which would overload the motors for too long a time.

(f) Such brakes must be installed and such a speed must be chosen on public highways that the train can be brought to a stop within the distance required by law.

It is worthy of note that a number of original narrow-gage roads, in order to become more serviceable, have changed over entirely to the standard gage, or have laid a third rail.

4. As the motors are mounted between the wheels of the motor car, it is evident that larger motors can be installed on standardgage cars than on those built for narrow gage. To compensate for this difference, it is often necessary to equip narrow-gage cars with two motors, which entails a considerable expense. It has the

* Abstract of report read before the International Tramway Congress, Paris, September, 1900. .

advantage, however, that if one motor should break down the other one will still be able to propel the car. Besides, a two-axle car more evenly distributes the weight and starts with less jar than a single-axle car. Furthermore, two motors and a seriesparallel controller permit of a better regulation of speed. It is also possible to attach a trailer to a motor car equipped with two heavy motors, or even attach a freight car during those hours when passenger traffic is light. To do this same work on a narrow-gage road, four-axle cars with four motors must be employed, which necessitates a considerable expense. It is also more advantageous to use larger motors running at a slower speed with the armatures mounted directly on the wheel axles and so avoid the use of reducing gears. Such motors can only be used on standard-gage cars.

5. The use of large motors on narrow-gage cars takes up all the room between the wheels. Thus the accessibility to the various parts is made more difficult, which is a great disadvantage. The motors are further exposed to a greater extent to the water thrown up from the track during travel, as the space beneath the motors is too small to allow for the provision of proper guards.

6. The small space also forbids the mounting of air pumps for the use of air brakes alongside of the motors, and in any case the arrangement of the brake mechanism is less convenient on narrow gage than on standard-gage cars, on account of the crowded condition between the wheels.

7. The standard-gage cars are also more stable than narrowgage cars. In the latter cars with longitudinal seats the wheel boxes become very objectionable.

8. In conclusion, a few remarks should be addressed on this subject to the owners and maintainers of highways who are in the habit of advising the railway companies to build narrow-gage roads because they take up less room than those of standard gage. This is an erroneous idea, however, as experience has shown that other vehicles will not use the narrow-gage tracks, but travel alongside, and thus take up a great deal of valuable space on the roadway. As the narrow-gage cars have the same width as the standard gage ones, the space taken up by them is the same. There will, furthermore, be fewer collisions between vehicles and from the gage line.

From the above it will be seen that for electric street railway service the standard gage possesses many advantages, and is more commonly employed. I should not recommend the change to the narrow gage, which would exclude the possibility of running street cars over steam railroad tracks.

The Falk Cast-Welded Joint*

BY J. FISCHER-DICK, ENGINEER OF THE GROSSE BERLINER STRASSENBAHN

This paper is based on replies received to the following questions sent to the members of the association:

Have you used the Falk rail-joint, and with what success?

When did you introduce the joint?

On what length of track was it used, and what form of rail section?

What technical reasons led to its adoption? Did you use it on new track or old track, so as to avoid the

renewal of the latter? What special reasons can you give to justify the great expense

of such an installation? What was the cost per joint of road and pavement work, of the cleaning of rail ends, wages for casting the same and the molten metal? How large a royalty must be paid, and what other expenses are there?

What installation and material are required as regards cost and quantity?

How large a proportion of the cast joints broke?

Did the breaks occur at certain periods of the year?

How long after the joints were cast did the breaks occur?

How great a length of track could be thus welded without

fear of trouble from expansion and contraction?

Are you using rail-bonds in addition to the Falk joint?

Have you any further remarks to make?

These questions were answered by only two companies, the Grosse Berliner Strassenbahn and the Compagnie Générale Francaise de Tramways of Paris. Ten companies reported that they have not introduced the Falk joint. The Tramways Bruxellois submitted the questions to four American and four French companies and the replies have been advantageously utilized in the compilation of this report.

* Paper read before the International Tramway Congress, Paris, September, 1900.

The Falk patent is an American one, and was first used in November, 1894, by the Citizens' Railway Company, which has now used it on all its line (about 40 km up to 1899). The Chicago City Railway Company, the Twin Cities Rapid Transit Company and the Memphis Street Railway Company followed in 1895. The Chicago City Railway Company has placed inside of four years 40,000 joints on its 161 km of track.

In Europe the first company to use it was the Tramways de Lyon in 1896; the Compagnie Générale Francaise de Tramways of Havre and Matseilles followed in 1898, etc. The writer made a trip to Lyons in 1897, and the result was that during the winter of 1897-98 the Falk joint was introduced on the Grosse Berliner Strassenbahn. In Lyons there are 1700, in Rouen 1200, in Havre 6500, in Marseilles 6000, in Paris 2600, in Nice 3400 and in Berlin 7609 joints. In all cases the companies used the joint because they wanted an even, jarless track, a more durable track construction and reduced maintenance expenses.

The cost per joint varies according to the rail section, as the Marsillon rail (Lyons) requires less metal than the Phœnix rail (Berlin). The cost given by the Compagnie Générale Francaise is f.2030 per joint, without license and depreciation; f.15.60 at Havre; f.20.10 at Lyons, and f.16.50 at Marseilles.

The Twin Cities Rapid Transit Company, which has taken out license rights, places the cost at \$2 per joint without including track repairs and cost of patent. This is for a 30-kg rail

The Berlin road paid Th. Smidt, the Falk representative, 20 marks per joint exclusive of road work, and now this price has been raised to 25 marks.

The following are a few of the replies received to the question: How much material is required to cast fifty joints? In Lyons, with twenty-five molds, clamps, etc., costing f.20.75 exclusive of furnace, too joints were cast in one night. The Chicago City Railways Company used a furnace, two wagons with six horses, thirty-five laborers, foremen, watchmen and inspectors, and cast 150 joints each night on 4-in. and 5-in. rails, ninety on 7-in. rails, and forty-five on 9-in. rails. The opening of the pavement, casting and repaving required one and one-half days. The Twin Cities Rapid Transit Company, in laying new tracks, cast from seventy-five to 100 joints in one day, employing fifty nsen. The Berlin company reports that the material for fifty 75-kg joints costs 400 marks.

terial for fifty 75-kg joints costs 400 marks. The Citizens' Railway Company reports 1 pcr cent breakage, the Chicago City Railway Company $\frac{1}{4}$ per cent, the Twin Cities Rapid Transit Company no breaks in asphalt, but 5 per cent in macadam and ordinary pavement. The latter company puts a fish-plate joint at every 1000 feet. The Memphis Street Railway Company reports a $\frac{1}{2}$ per cent breakage, the Tramways de Lyon $\frac{1}{2}$ per cent, at Havre four breaks occurred on 3800 joints, at Berlin 1 $\frac{1}{4}$ per cent broke. In Berlin no fish-plate joints are used, while the Compagnie Générale places them every 250 m.

The breakage of joints in the mold is ascribed to careless cleaning of rail ends; the breakage later to rail contraction. At Berlin the latter was found to be from 35 to 50 mm for every 100 m of track. Only one break occurred in Berlin on joints laid in asphalt.

All companies speak in the highest terms of the usefulness and economy of the Falk joint when properly executed. Old, wornout tracks have been made serviceable for many years to come With new tracks, noiseless running of cars is secured, and the tracks will last for a longer time. It should be stated that America leads in the extent to which the Falk joint is used, and in Europe France takes foremost place. Lately, however, the Goldschmidt rail weld is being tried by several roads, and the result is being watched with interest.

The shortening of the rail after the joints have been cast is still an unexplained phenomenon. It is also a remarkable fact that even during the hottest day no expansion of the rail can be observed. In building new track the contraction of the rails can be considerably reduced, but such is not the case with old rails. Furthermore, it was found that wherever a break occurred the rail contracted considerably, and fish-plates bolted at these places had soon to be replaced by longer ones.

The advantage of casting over welding is that the rail is only heated excessively at the web and foot in the first method, while in welding it is dangerously heated throughout the entire end where the weld is made.

A disadvantage of the Falk method appears to be the fact that it is not economical to cast as small a number as twenty joints, as the material in the furnaces is not all utilized. In Berlin, for example, the repairing is proceeded with simultaneously with the track construction, so that only eight to ten joints could be cast; which makes it entirely out of the question.

In conclusion it should be stated that the Falk joint has lightened the burdens of and removed the fears entertained by the railway engineer, and has become of great financial value.

The Milwaukee 4-Cent Fare Decision

Reference was made in the issue of this paper for Nov. 3 to the recent decision of the Supreme Court of Wisconsin in favor of the Milwaukee Electric Railway & Light Company, broadly sustaining that company in the franchises which had been awarded it by the Common Council. The decision is such an important one that it is given in full below:

RULING OF THE COURT

Winslow, Justice.-"With the somewhat novel practice followed in this case, by which a new plaintiff owning property on a distant street was allowed to be substituted for the original plaintiff, and the original injunctional order was permitted to remain in force practically without complaint for weeks, while the new plaintiff was preparing his complaint, we are not concerned. No question as to the propriety or regularity of these proceedings is before us because the present appeals are simply appeals from orders refusing to vacate the preliminary injunctional order. Upon appeal from a judgment intermediate orders involving the merits and necessarily affecting the judgment may be reviewed. (R. S. Sec. 3070.) But we know of no provision which authorizes a review of one order upon an appeal from another. (Breed vs. Ketchum, 51 Wis., 164.) That the court had jurisdiction to refuse to allow the plaintiff to arbitrarily discontinue the case and also jurisdiction to allow plaintiff to be substituted in his place was decided by this court in this very case. (State ex-rel vs. Ludwig, 106 Wis.)

FRANCHISES WOULD BE ANNULLED

"So the case reached this court upon the appeal from the order of June 9 in the same condition as it was in the trial court. The substitution of the Linden Land Company as plaintiff in place of the original plaintiff and the addition of Charles J. Eigel as a plaintiff, are accomplished facts not open to question or review, and we are to consider and decide whether under the pleadings and affidavits before the court they or either of them were entitled to the injunctional order originally granted. The case presented then is one in which two citizens claiming to represent many thousand similarly situated have come into court and challenged the validity of franchises granted by the City Council and demanded judgment that the grantee of the franchises be forbidden to accept or utilize them, a judgment which, if granted, practically vacates and annuls the franchises as effectually as if they were vacated at the suit of the State.

MUST SHOW INDIVIDUAL DAMAGE

"It is familiar law that courts do not revise, control or vacate the acts of a municipal government at the suit of private persons except as incidental or subsidiary to the protection of some private right or prevention of some private wrong. (Pedrick vs. Ripon, 73 Wis., 622 Nast vs. Eden, 89 Wis., 610.) The private person so suing must show something more than a mere speculative or theoretical wrong or illegal act; he must show an actual or threatened invasion or destruction of a distinct right belonging to himself or to the body of citizens for whom he sues. He cannot sue to prevent an act merely because it is illegal. Any other rule would render the transaction of municipal business well nigh impossible.

"The present action must be tested by this right. The claim of the plaintiffs is practically that they do come within the rule because they allege that they are taxpayers of the city and also abutting owners upon streets covered by the franchise, and it is very evident that if the action is sustained at all it must be on the ground that their rights, either as taxpayers or as abutting owners, or both, are threatened with illegal invasion.

"The claim that this is a proper taxpayers' action will first be considered. No court has been more liberal in maintaining the right of a taxpayer to vindicate the rights of himself and his fellow taxpayers against the actual or threatened malfeasance or nonfeasance of public officers than this court.

"The cases are numerous and many of them recent. Such actions may be brought where municipal authorities are about to unlawfully dispose of public property or pay out public funds or about to enter into unlawful and unauthorized contracts which will require public funds to discharge them, thus increasing the burdens of taxpayers or squandering the property of the taxpayers, or both. (Webster vs. Douglas County, 102, Wis. 181, and cases cited; Rice vs. Milwaukee 100, Wis. 516.) And in a proper case the court will go further and compel the unfaithful officers and even third persons to repay into the treasury sums already illegally paid out. These cases go on the principle that the money or property so squandered or about to be squandered is the money of the taxpayers, and hence every taxpayer has a substantial interest in it which he is entitled to have protected.

RIGHT OF TAXPAYERS,

"Upon similar principles a taxpayer's right to enforce a case of action of the corporation is upheld when the corporate officials wrongfully refuse or neglect to perform the duty. (Estate of Cole, 102 Wis. I.) Here the basis of the right is not that there is necessarily a personal and direct pecuniary loss to the taxpayer, but that the public moneys, rights or property are about to be squandered or surrendered, and that such moneys, rights or property belong to the body of taxpayers and are simply held in trust by the unfaithful public officers.

"This is well illustrated in the case of estate of Cole just cited, where real and personal property was willed in remainder to a city in trust for the establishment of a public library and a home for the aged poor, and a controversy arose between the executors and the city in the County Court as to whether certain expenditures upon the property should be charged against the life tenant of the property or against the corpus of the estate. The County Court decided against the city, and the city officials declining to appeal, a taxpayer interested took the appeal to the Circuit Court, and his right to do so was sustained by this court.

"Here no taxpayer could be said, in strictness, to have suffered a direct or pecuniary injury by the decision of the County Court or the failure to appeal therefrom, but the illegal diminution of the trust property was a distinct invasion of the property of the corporation in which each individual taxpayer or member of the corporation had a substantial interest, notwithstanding the property could only be used for the purposes of the trust, and its entire loss would not necessarily result in increased taxation. So understood, the case is in entire harmony with the general principles laid down in the other cases in this court.

THE 4-CENT FRANCHISE NOT A SQUANDERING OF FUNDS

"Further than this it is not believed that any case has gone in this court, nor is it believed that any further extension of the rule is expedient or necessary. So the question is whether it is shown in this case that any wrongful squandering or surrender of the moneys, property or property rights of the city or unlawful increase in the burdens of taxation is threatened by the proposed ordinance within the rule above stated. It is claimed that such a squandering of valuable property is shown because it is alleged that before the passage of the ordinance the city was offered \$100,-000 by a third party for the additional franchises granted to the defendant railway company by the ordinance, and also because it appears that the defendant company itself'in the year 1898 offered to pay the city annually on the 1st of January of each year a large sum of money, beginning with \$50,000, and increasing the sums each year by \$10,000 until it reached \$100,000 annually, on condition said city would grant the right to charge 5-cent fares until the These offers were, however, rejected by the city, and year 1935. the present ordinance adopted, by the terms of which no moneys are to be paid to the city, but the company is required to sell twenty-five tickets for \$1, good for travel during certain morning and evening hours until Jan. 1, 1905, and after that time good during all hours of the day.

"It seems very plain to us that this action of the Council cannot be called in any proper or reasonable sense a squandering of public funds or property.

DISCRETIONARY WITH THE COUNCIL

"The same considerations evidently apply to a number of other allegations in the complaint to the effect that the grant of the franchise will necessitate putting the city to great expense in repairing, widening and improving streets, and violates and will seriously injure the water system of the city by electrolysis of the pipes, thus increasing the burdens of the taxpayers. The fact that such injurious effects to streets or water pipes in the streets are liable to result from the granting of the franchise does not impair the power to grant it, but simply becomes an important consideration to be taken into account in the fixing of the terms which shall accompany the grant. This question also becomes a question of discretion.

CITY TO DECIDE ON BENEFITS

"By section 1862 R. S. the city is empowered to grant the use of streets and bridges to street railway corporations upon such terms as the proper authorities shall determine. Here is a broad grant of discretionary power. The question before the Council was, what terms shall be attached to the granc. Is it more beneficial to the public to secure a cash payment or payments which will benefit taxpayers only or to secure lower rates of fare for the public generally, or to impose other conditions. After exercising this discretion and deciding that the terms imposed should be a gradual reduction of fare rather than payment of money into the treasury, it cannot be said that any city fund has been squandered, lost or misused. Whether the city should receive any fund was a question for the Council in its discretion to decide. When it decided that there should be no fund, but that reduced fares or other limitations upon the grant were more desirable for the public, it may or may not have exercised good discretion, but it has dissipated no city fund or property.

THAT OFFER OF \$100,000

"And so with regard to the proposal of the third person to pay \$100,000 for the additional privileges granted to the defendant company. The additional privileges were a fcw fragments of widely separated streets. If used by the defendant company in connection with its other lines covering almost the entire city with the system of transfers provided by the ordinance, they would probably complete a harmonious system, but if attempted to be used by an independent company as a separate line, it seems probable that they would be far less useful to the public. It was undoubtedly a question addressed to the sound discretion of the Council whether the franchise should be sold to a third person who could only run fragmentary lines or should be granted to a company which would be required to incorporate the fragments into its system, and thus furnish to the traveling public continuous trips under a transfer system from one part of the city to another for a single fare.

NO CAUSE OF ACTION STATED

"Such discretion is vested in the Common Council, and cannot be controlled by a taxpayer or any body of taxpayers. We have found no other allegations which can reasonably be claimed to state any substantial injuries to the plaintiffs as taxpayers within the rules governing taxpayers' actions, and the conclusion necessarily follows that no cause of action is stated in the complaint in favor of the plaintiffs as taxpayers only.

"But the question remains whether a cause of action is stated in favor of either plaintiff as an abutting owner of real estate. Before proceeding to consider this question upon its merits, it seems necessary to dispose of a preliminary question which was much argued, namely, whether one abutting owner can maintain such an action on behalf of all other abutting owners. It is very evident that in a proper taxpayer's action challenging the illegal waste or squandering of corporate funds or property, the question is one of common or general interest of many persons, thus bringing the case within section 2604 R. S., and allowing one to sue for the benefit of all, because the fund or property threatened is undivided, and the interests of the taxpayers therein are inseparable. But it is equally evident that the same considerations in no way apply to the interests of abutting owners who own separate parcels of property. In this case the interest of each property owner is separate and distinct from that of every other property owner.

INTEREST OF OWNERS NOT THE SAME

"One owner in severalty is in no way interested in the injury (if any) to his neighbor's lot. In fact, the owner of one lot may consider his property injured, and the owner of an adjoining lot may consider his lot benefited by the proposed street railway, and such may be, in fact, the case, resulting from the different uses in which the two lots are or may be put.

"It is true that it has been held by this court that in case of a threatened nuisance, affecting several parcels of real estate alike, the several owners may join in an action to prevent the projected nuisance. This principle has been applied to the construction of a bridge without legal authority which would be a nuisance to several riparian owners (Barns vs. Racine, 4 Wis., 454); to the unlawful encumbering of a park or public place with buildings which would constitute a nuisance to the owners of lots fronting upon it (Pettibone vs. Hamilton, 45 Wis., 402); also to the diversion of water in a river to the injury of several riparian owners (Grand Rapids W. P. Co. vs. Bensley, 75 Wis., 399). But the effect of these decisions is not that one may sue for the benefit of all, but simply that all such parties similarly affected are properly, though not necessarily, parties to an action. (Kaukauna vs. G. B. & M. Co., 75 Wis., 390.) They may join in one action if they choose, but they are not compelled to, and it follows logically from this that if they do not join, no one owner is bound by the result of another's separate action.

OWNERS MUST BE SIMILARLY SITUATED

"The theory of the action where one property owner sues for all is that the result is conclusive on all who are similarly situated, and whom the plaintiff rightfully represents, and such must be the theory, or else the plaintiff does not represent all, and the statement that he does is not only false, but absurd. It is palpably evident that the principle cannot apply to abutters because, as said before, they may join or not as they choose; if one can rightfully refuse to join, his rights manifestly cannot be litigated or determined in the action, and hence he cannot be bound by the result, and by no legal action can it be said that he has been represented in the action. "It is well settled that the property owners in severalty cannot join as plaintiffs to set aside an illegal tax upon their separate lots, nor can they sue on behalf of themselves and other taxpayers. (Barnes vs. Beloit, 19 Wis. 93; Pier vs. Fond du Lac, 53 Wis., 421.) The line which divides this last named class of cases from the classes of cases holding that two or more property owners may join to prevent a nuisance affecting their several lots alike, is perhaps somewhat difficult to draw, but in any event neither rule justifies the bringing of the present action by one abutter for the benefit of all.

"Treating a street railway about to be laid upon a street without authority of law as a continued nuisance to the owners of abutting lots, the most that can be said under the decisions in this State is that two or more owners in severalty of abutting lots similarly affected, may join as plaintiffs, but that one cannot sue for the benefit of all, and a statement that he does so sue is mere surplusage.

AN IMPORTANT CONTINGENCY

"Whether, as in the present case, an abutting owner upon one street may join with an abutting owner upon another street a mile or more distant, even though it is intended to connect the lines upon the two streets with lines already existing, may be a serious question, but it is one which we do not feel called upon to decide. We are not now considering the case upon demurrer for improper joinder, and it seems that if it appears by the complaint and the papers used upon the motion to vacate, that either plaintiff was legally entitled to have the injunctional order maintained pending the action, then the motion to vacate was properly denied.

SUCH RELIEF NOT NECESSARY

"Proceeding then to consider the rights of the plaintiffs as abutting owners simply, and conceding that the pleading affidavits show the supposed franchise to be invalid, and hence that they were entitled to an injunction preventing the laying of the railway upon the particular street in front of the several lots, it is still impossible to see how they could properly demand that the railway company should be prevented from accepting the franchise, and thus, in effect, annulling the entire grant.

"Such relief was in no way necessary to the protection of any right they have as abutters; their lots and all rights therein were completely and fully protected from injury when the proposed railway was debarred from entering upon the street upon which their property abuts. They need nothing further.

RULE AS TO INJUNCTIONS

"The only true object and purpose of a preliminary injunctional order, either at common law or under the statute, is to prevent the commission or continuance of some act, 'the commission or continuance of which, during the litigation, would produce injury to the plaintiff." (R. S. Sec. 2774.)

"The court may enjoin any threatened act during the litigation when such act would produce injury to the plaintiff's rights, but it will go no further than necessary for that purpose. The extent of the necessity marks the extent of the right to enjoin.

CANNOT BE DEFENDED FOR A MOMENT

"To go further, and enjoin other acts which if done do not affect the rights in litigation in any way, is simply an exercise of arbitrary power which cannot be defended for a moment. So it seems to us certain that so far as the preliminary injunctional order prevented the defendant railway company from accepting the franchise it should have been vacated because the acceptance could in no way affect the rights of either plaintiff. Upon the same principle it results that the Linden Land Company, suing to protect its rights as an abutter on Locust Street, had no standing in court to insist that the injunctional order restraining the laying of tracks on First Avenue, a mile and a half distant, should stand *pendente lite.*

"The building of a track on First Avenue could not injure its property nor affect its rights as to the building of a track on Locust Street a particle.

THE QUESTION AT ISSUE

"Thus the case is reduced to the simple question whether the plaintiff Eigel, as an abutting property owner on First Avenue, is shown to be entitled to an injunction, *pendente lite*, preventing the building of the track and operating of street cars in front of his property on First Avenue. That an abutting lot owner may enjoin the laying of a railway track which is about to be laid without authority of law on the street in front of his premises cannot be doubted for a moment. It is unnecessary to cite cases upon this proposition. In the present case it is claimed that the grant to the railway company is void, and conveys no power to lay tracks for several reasons which will not be considered.

JUST LIKE THE LA CROSSE CASE

"I. It is said that the laying and operation of an electric railway to be operated by the overhead system with trolley wires and supporting poles is an additional burden on the fee, and hence that it cannot be done without making compensation to the adjoining lot owners. "This contention is ruled in the negative by the case of La

"This contention is ruled in the negative by the case of La Crosse City Railway Company against Higbee, 'present term,' where the exact question was discussed and decided. The ordinance in the present case is essentially identical with the one involved in that case; it authorizes the carriage of passengers only and in the absence of a showing that it is proposed to locate poles or structures in such manner as to interfere with a property owner's right of access to his property, it must be held that the present case is ruled by the La Crosse case upon this question.

AS TO COMMERCIAL RAILWAYS

"2. It is claimed that section 1862 R. S., under which the defendant corporation is incorporated, is unconstitutional because it attempts to authorize the formation of street railway operations vested with the power to carry freight as well as passengers, thus making it a commercial railway, and also authorizes municipal corporations to grant the use of streets to such railway companies for the carriage of freight and passengers, and nowhere provides for the payment of compensation to the abutting owners.

"It may be admitted for the purpose of the case that a railway authorized to carry freight as well as passengers becomes a commercial railway instead of a street railway, and that such a railway, when laid in a street, becomes an additional burden on the fee, and cannot be laid without the consent of, or compensation made to, the adjoining owners. (Chicago & Northwestern Railway Company vs. M. R. & K. Railway Company, 95 Wis. 561.) But this hardly meets the question. It is true that our statutes contain no provisions authorizing such companies to condemn private property in the streets of cities or villages, although such condemnation may be had outside of cities and villages, R. S. Sec. 1863a.

"It is not quite clear how this deficiency in the law affects the corporate character of the defendant corporation. It may render it impossible for it to lay or operate a track for the transportation of freight without actually purchasing the right from private owners to cross their lands, but the Legislature certainly had power to authorize the formation of just such corporations, and if it neglected to provide the corporation, when formed, with a means essential to its successful operation, the result would seem to be a very unfortunate one for the corporation, and perhaps one fatal to its business success, but not fatal to its corporate character. If such a corporation attempt to condemn, it could be successfully defeated by the fact that it was given no such power, and if it attempted to lay tracks without condemning, it would be stopped with the proposition that it was taking private property without compensation.

OTHER IMPORTANT CONSIDERATIONS

"Passing this question, however, there are other considerations which seem to us to answer the contention without serious difficulty. The law should be sustained, if possible, on any reasonable Every intendment is in its favor. We think it may reatheory. sonably be said that this law was only intended to authorize corporations to use streets with the consent of the city for carriage of freight as against the rights of the public only, and not as against private owners, leaving such private owners in full possession of their rights to stop the construction, insist on compensation or give their consent, as they chose. Such was substantially the construction placed upon the act authorizing telegraph companies to place their poles in streets in the case of Krueger vs. Wisconsin Telephone Company, 106 Wis. This construction seems to us to be entirely reasonable; it deprives the property owner of no substantial right, and has the additional merit that it does not violently disturb the many valuable rights and property interests, both public and private, which, doubtless, have arisen, founded in good faith upon the validity of the legislation attacked.

RIGHT TO USE THE STREET

"Furthermore, it will be noticed that the corporation does not obtain its right to use any given street from the terms of its charter. It might exist for a century, and if no municipality saw fit to grant it a franchise to use its streets, it could do no business. In the present case, the city has not chosen to grant it any right to carry freight upon a single street; all the franchises which it owns by purchase, as well as the franchise now in question, simply confer the right to carry passengers only, or, in other words, to build and maintain a street railway in the usual and ordinary sense of the term, and we do not see how it can for a moment claim

power to carry freight over its lines in the city of Milwaukee or do anything more than maintain a street railway, the carriage of passengers only. If it can only maintain and operate a street railway, it is quite difficult to see how the plaintiff can be injured in any way by the failure of the Legislature to endow the corporation with power to condemn private property.

IMPORTANT POINT SETTLED

"3. Another claim is that the ordinance is unconstitutional because it is in effect a special or private law 'granting corporate powers or privilege,' and so prohibited by section 31 of article 4 of the constitution. The argument is that the ordinance attempts to confer corporate powers and privileges: that it is a special act of legislation, that in enacting it, the City Council was simply exercising legislative power attempted to be delegated to it by the State, or in other words, was pro hac vice the Legislature; that under the constitutional provisions above cited, the Legislature itself could pass no such laws, and that the City Council can possess no greater power than the Legislature.

"This is an important contention, and, if it is well founded, is fraught with serious results to many interests, for it cannot be doubted that the power supposed to be granted to municipal corporations to grant such privileges as are herein questioned has been very frequently used.

"But there is a radical difficulty with the first premise, which demolishes the entire argument. While such franchises as were here granted are legislative grants, they are not corporate powers or privileges within the meaning of the constitution. When granted to a corporation, they become the property of the corporation, and so may be called franchises of the corporation, but they are not 'franchises essential to corporate existence, and granted as part of the organic act of incorporation.' State ex-rel vs. Portage City Water Company (present term).

"Some confusion undoubtedly exists in the cases on this subject, and such franchises have been sometimes called 'corporate franchises,' as noted in the case last cited, but this does not affect the true character of the franchises. The distinction was pointed out by Chief Justice Ryan in the railway cases, 35 Wis. 425, on page 560. Speaking of this very clause of the constitution, he said that the phrase 'to grant corporate charters,' and further 'a franchise is not essentially corporate, and it is not the grant of a franchise which is prohibited, but of a corporate franchise; that is, as we understand it, franchise by act of incorporation.' This construction was followed and approved in B. R. I. Company vs. Holway, 87 Wis. 584, and, indeed, it seems, upon reflection, the only reasonable construction which can be placed on the constitutional provisions. Such franchises as those before us may be sold and assigned, if assignable, or the corporation may be deprived of them by forefeiture, and yet the corporate existence would be in no way affected. This consideration effectually disposes of the argument on this point, and renders it unnecessary to inquire whether there may not be other infirmities in the argument which are equally fatal to it.

ANO¹HER CLAIM OVERRULED

"4. Another claim made is that the Council had no power to extend existing unexpired franchises long before their expiration, and that even if it had such power the ordinance is void because it is unreasonable. It may be noted in passing that neither of the plaintiffs owns any property abutting on any of the streets containing existing lines of railway, and hence, as abutter, they would seem to have no interest authorizing them to attack these parts of the ordinance extending to the life of previous grants; but granting that they are entitled to raise that question, we do not think the ordinance can be held void on either ground.

POWER OF CITIES

"The statutes (Sec. 1862, R. S.) gives the municipality power to grant to street railway companies the use of streets without limitation, save that such grant be made 'upon such terms as the proper authorities shall determine.' This is certainly a very broad grant of power, certainly more comprehensive than the statute of Indiana, under which the case of City Railway Company vs. Citizens' Street Railway Company, 166 U. S. 557, was decided. In that case the law required that street railway companies should first 'obtain the consent of such Common Council to the location, survey and construction of any street railway through or across the public streets of any city, before the construction of the same,' and it was held that where a thirty-year franchise had been granted in 1864 to a street railway company for a term of thirty years, the unexpired franchise might legally be extended in 1880 (fourteen years before its expiration) for the term of seven years, so that it would not expire until 1901, and that the continued operation of the road was sufficient consideration for such extension.

"The case seems strictly applicable here. In the present case some of the existing franchises already owned by the defendant railway company expired in the year 1924, and some in succeeding years, and they were all extended in terms until the year 1934. We are unable to see that there was lack of power to do this, nor that the extension of time was unreasonable. Many of the franchises were granted in very recent years, some of them as late as the year 1890, and franchises for terms of forty and fifty years, and even longer, are frequently upheld by the courts. We have been unable to find by an examination of the ordinance that its terms are unreasonable, at least to such an extent as would justify a court in declaring it yoid. To arrive at such a conclusion, the unreasonable character of the ordinance ought to be very clear.

"5. We pass now to a number of objections which may be considered together. They are, in effect, objections to the regularity of the Council proceedings in the adoption of the ordinance. It is said that section 940B of the Revised Statutes, which requires the application for the franchise containing the substance of the privileges asked for to be filed with the City Clerk, and published in the official paper for not less than two weeks previous to action on such publication, was not complied with; it is also said certain provisions of the city charter, requiring all ordinances to be referred to appropriate committees, and not to be acted upon except after report made by the committee, has not been complied with; it is also said that it appears that the officers of the railway company used corrupt methods in securing the passage of the ordinance, in that they agreed to pay large sums to certain citizens to induce them to cease their opposition to the passage of the ordinance.

"It is sufficient to say, with regard to these claims, that whatever may be the rule elsewhere, it has been held in this State that these questions cannot be raised at the suit of private parties. (Stedman et al. vs. Berlin, 97 Wis., 505.) That case was a taxpayer's action in equity brought to set aside the grant of a franchise to build and maintain public waterworks in the city of Berlin. The grantee of the franchise had accepted the franchise, and given bond for the performance of the requirements of the ordinance, but had not commenced to construct the plant.

"It was charged in the complaint that the franchise was void because the provisions of section 940B, R. S., had not been complied with, and that it had been procured by the grantee by means of improper and undue influence exercised by him upon the members of the Common Council. This court held, however, that the remedy to set aside a franchise irregularly or fraudulently granted under the circumstances there presented was by *quo warranto* or *scie facias*, at the suit of the State, and not in an equitable action at the suit of private parties.

COMPANY EXERCISING ITS PRIVILEGES

"The present case is substantially identical in its essential facts with the one just cited. It is true that no formal acceptance of the ordinance had been placed on file, but the company was shown to be in possession of its already constructed lines, and transacting its business thereon, selling tickets at the reduced rate, and performing the obligations required of it by the terms of its new franchises. It was certainly quite as much in the exercise of the privileges conferred by the franchise as was the grantee of the franchise in the Stedman case, who had not commenced even to build his plant. The principle here adopted is quite analogous to that applied to an application for leave to bring action in behalf of the State to annul the franchises of such a corporation on account of misuse or nonuse thereof. Such leave will not be given as a matter of course for every dereliction of duty, but it will be granted or not, as the interests of the public seem to demand. (Sate ex-rel vs. Janesville Water Company, 92 Wis, 496.)

"So here, upon the facts presented, it is not at all certain that the present franchise would be set aside at the suit of the State. It appears that a notice containing a full copy of the proposed ordinance was published for more than two weeks prior to the final passage of the ordinance. This is claimed to have been insufficient by the plaintiff, because he said it ought to have been published two weeks before any action was taken by the Common Council, and because the ordinance was amended in some minor details just before passage. Now it may be a serious question whether section 940B, R. S., means that the publication shall be made for two weeks before any action, however slight, or before final action. The section simply says: 'Before action.' It appears also that the ordinance, as originally presented, was referred to a select committee, who reported a substitute ordinance, and because it is claimed that the requirements of charter have been met, notwithstanding there were some minor amendments made, after the report and before passage. Furthermore, a resolution was passed by the Council at the same meeting, when the ordinance was passed granting time, the same franchise in identical terms with those contained in the ordinance, and, it is claimed, and with apparent reason, that if the ordinance fails, still the resolution may be effective.

"Section 1862 does not require the franchises to be granted by ordinance, hence it may undoubtedly be done by resolution. The resolution was first introduced on the night of its passage, hence the publication of notice was for two weeks previous to 'any action,' as well as to final action, and the charter provisions as to the reference of ordinances to committees does not apply to resolutions. Considering these facts, and the evident strenuous attempt to conform to all statutory requirements, it may be doubtful whether any court would feel that valuable franchises should be forfeited—even at the suit of the State, even though it might conclude that there was some irregularity in the proceedings. It is enough, however, that the question is not open in this action.

CHARGES OF CORRUPTION

"The same considerations in effect apply to the charge of corrupt practices. It is not charged that any member of the Council was corrupted, but that certain citizens who opposed the ordinance were bought off with money. This charge is explained in the answer as follows: The ordinance allowed the railway company to use a viaduct for the building of which a number of property owners had paid about \$6,000 special assessments. As the building of the railway across the viaduct turned it partially into a railway bridge it diminished its usefulness to the property owners who had contributed to its erection. They objected to such use unless they were repaid what they had put into it over and above their share as general taxpayers. In this situation the officers of the street railway company agreed to make good to the property owners what they had paid by way of special assessments. This was done without concealment, but was known to all. Even were we disposed to find fault with the transaction, the rule of the Stedman case plainly covers it.

"We have discussed the case as presented upon the second motion to vacate; any separate discussion of the first motion is unnecessary. Our conclusion is that both motions should have been granted.

SUPREME COURT'S ORDER

"By the Court.—Ordered reversed and action remanded with directions to vacate the preliminary injunctional order and for further proceedings according to the law."

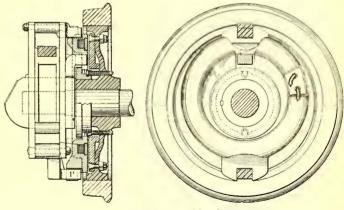
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Street Railway Patents

[This department is conducted by W. A. Rosenbaum, patent attorney, 177 Times Building, New York.]

ELECTRIC RAILWAY PATENTS ISSUED OCTOBER 23, 1900

660.315. Automatic Railway Switch: W. Schoenewald, Philadelphia, Pa. App. filed Oct. 17, 1899. Details of a switch adapted to be actuated by levers carried by the moving car.



PATENT NO. 660,487

660,353. Railway Crossing Structure; W. C. Wood, New York, N. Y. App. filed May 9, 1900. At the intersection of converging rails is a seat or floor, formed of iron, applied in a molten state to the rails, and serving as a binder. A wearing piece of special construction is removably attached to the seat or floor.

660,422. Car Truck; J. S. Francis, Bloomington, Ill. App. filed May 16, 1899. Details of an all-metal truck.

660,465. Track Cleaner; E. Sarver, Deadwood, South Dakota. App. filed Jan. 20, 1900. Comprises revolving cutters, adapted to remove the packed snow and ice from opposite sides of the rails of the track.

660.484. Rail-Joint; H. M. Boyd, Sierra Blanca, Texas, and H. Redmon, Cynthiana, Ky. App. filed Jan. 31, 1900. Provides a fastening means for rail-joints consisting of complementary parts

of similar formation, which are adapted to embrace the bottom and top sides of the foot and the sides of the web, and extend along the underside of the head.

660,487. Electric Brake; F. E. Case, Schenectady, N. Y. App. filed Aug. 5, 1898. The brake shoe is applied to the outside of the wheel, the wheel being provided with a properly machined surface. The shoe is adapted to follow the end play of the axle to avoid variations of the air gap.

660.546. Sander, B. B. Jenkins, Toronto, Canada. App. filed July 17, 1899. Consists of a hopper having a slide-valve at the bottom, which is operable from platform of car. The opening of the valve vibrates an agitator and loosens up the sand.

ELECTRIC RAILWAY PATENTS ISSUED OCT. 30, 1900.

660,565. Street Car Fender; H. Furstenau, Wandsbeck, Germany. App. filed March 3, 1899. Comprises a netting and a frame having rollers adapted to run on roadway ahead of the car.

660,610. Supporting Strap for Cars; L. T. Yoder, Pittsburgh, Pa. App. filed Nov. 27, 1899. Consists of a series of straps rigidly secured to the overhead rod and to each other at their crossing points, and having loops at their lower ends.

660,645. Track Brake for Railway Cars; E. L. Lowe, San Francisco, Cal. App. filed March 23, 1900. Consists of a brake block and shoe having their contacting surfaces inclined, the opposite side of the shoe being parallel with the railway track.

660,647. Brake-Operating Mechanism; J. E. Normand, Watertown, N. Y. App. filed July 29, 1899. The brake shoe has but a single point of support, a spring being arranged to hold the shoe initially in the correct position, but which, when the brake is applied, is flexible enough to permit the brake to assume its correct relation with the face of the wheel.

666,648. Brake-Operating Mechanism; J. E. Normand, Watertown, N. Y. App. filed July 29, 1899. Comprises brake beams with an equalizing lever connected thereto, and an operating lever for applying pressure to the equalizing lever, there being a universal joint between the equalizing lever and the operating lever.

660,649. Equalizing Lever; J. E. Normand, Watertown, N. Y. App. filed July 29, 1899. Comprises a system of equalizing levers adapted for use with a power brake, which may be also added to the rigging of a hand-brake system.

660,650. Air Brake; J. E. Normand, Watertown, N. Y. App. filed Sept. 21, 1899. Comprises an automatic valve mechanism; adapted under variations of pressure in the train-pipe, firstly, to permit free communication between said service reservoir and said reinforcing reservoir in either direction under normal or running conditions; secondly, to close communication to or from said reinforcing reservoir and to open communication between said service reservoir and said brake cylinder, under ordinary conditions; and thirdly, to open communication between both said reservoirs and said brake cylinder under full service stop conditions.

660,673. Railway Switch Operating Mechanism; W. Warneke, Milwaukee, Wis. App. filed July 2, 1900. Details of switch mechanism adapted to be tripped by a device lowered from the platform of the car.

660,779. Fender for Trolley Cars; L. Madas, New York, N. Y. App. filed Aug. 17, 1900. Structural details.

660,805. Actuating Device for Railway Appliances; E. A. Sperry, Cleveland, Ohio. App. filed May 17, 1897. A movable part lying in the path of a wheel or wheels of a locomotive or vehicle, and suitable connections between said movable part and the appliance to be actuated whereby the said appliance may be actuated in either of two directions or left quiescent by the torque condition of said wheel or wheels.

660,825. Actuating Device for Railway Appliances; E. A. Sperry, Cleveland, Ohio. App. filed Oct. 17. 1899. Relates to the automatic operation of switch points. (See preceding patent.) 660,903. Buffer for Street Cars: P. M. Kling. St. Louis, Mo.

660,903. Buffer for Street Cars: P. M. Kling, St. Louis, Mo. App. filed June 11, 1900. Details of a spring buffer. 660,904. Car Seat; P. M. Kling, St. Louis, Mo. App. filed

660,904. Car Seat; P. M. Kling, St. Louis, Mo. App. filed June 11, 1900. Structural details of a reversible seat.

660.958. Car Wheel: I. Hogeland, Indianapolis. Ind. App. filed May 16, 1900. A car wheel comprising a center having a stepped periphery, two of the faces of which, at opposite sides of the central face, are radial, and a tire having a stepped interior corresponding with the stepped periphery of the center; all of said mating faces being grooved or corrugated and spaced to receive packings or cushions between them.

11.867 (reissue). Mechanism for Operating Fare Registers; J. F. Ohmer and H. Tyler, Dayton, Ohio. Provides means whereby a single operating device arranged to receive motion of only one kind or in only one plane determines by the amount of such motion the particular class of fare to be indicated and registered, while the second operating device serves to register the fare selected by the position to which the first operating device has been moved.

PERSONAL MENTION

MR. GEORGE H. WALBRIDGE, of the J. G. White Company, of New York, and Miss Mary G. Taylor were married on Oct. 17.

MR. JAMES ROSS, vice-president of the Montreal Street Railway Company, of Montreal, Que., has just returned to Montreal after a two months' trip to England.

MR. J. A. BENDURE, purchasing agent and superintendent of the Atchison Railway, Light & Power Company, has been engaged to superintend the reconstruction of the Colorado Springs Street Railway Company.

GENERAL BENJAMIN FLAGLER, of Niagara Falls, died Oct. 30. General Flagler's military connections are well known, and he was also a prominent business man in Western New York. He was president of the first street railway at Niagara Falls, first vice-president of the Niagara Falls Power Company, and president of the Bank of Suspension Bridge since its organization in 1886.

MR. GORDON CAMPBELL, who for seven years has been connected with the North Jersey Traction Company and its predecessor in the capacity of purchasing agent, has accepted a position with the Union Railroad Company, Providence, R. I. Mr. Campbell is to begin his duties at once, his office being that of general superintendent. For two years he occupied the position of master mechanic as well as purchasing agent in Jersey City, so that he has a thorough knowledge of all the departments of a street railway company, and will undoubtedly prove a most satisfactory addition to the personnel of the Providence company.

ENGINEERING SOCIETIES

ENGINEERS' CLUB OF COLUMBUS.—A regular meeting of this club will be held Nov. 17. W. H. Miller will present a paper entitled, "On Application of Brakes."

BROOKLYN ENGINEERS' CLUB.—At a regular meeting of this club, held Nov. 8, Macdonough Craven presented a paper entitled, "The Burning of City Wastes: When and Where Advisable."

AMERICAN SOCIETY OF CIVIL ENGINEERS.—A regular meeting of this society was held at the Society House, New York, Nov. 7. Two papers were presented for discussion: "Canals Between the Great Lakes and New York," by Joseph Mayer, and "Great Lakes to the Atlantic," by George Y. Wisner.

NEWS NOTES

PINE BLUFF, Ark.—G. F. Carter and R. M. Nuall, of New York, are here in the interest of a new electric railway project. It is said that they will make an effort to secure a franchise from the City Council at once. W. II. Keyser, of Chicago, now holds a franchise for a line here, but, as no work has as yet been done, it is believed that it will undoubtedly be forfeited.

NEW HAVEN, CONN.-A head-on collision occurred between two cars of the Fair Haven & Westville Railroad on Oct. 30. The motorman of one of the cars was severely injured, and the cars were badly damaged.

ATLANTA, GA.—An accident to one of the engines in the Atlanta Railway & Power Company's plant caused a temporary suspension of traffic on its lines from 6:55 p. m. to 10:30 p. m. on Oct. 25.

AURORA, ILL.-The Aurora, Yorkville & Morris Railroad has just been completed and placed in operation.

CHICAGO, ILL.—A car of the Chicago City Railway Company crashed into a south-bound Illinois Central suburban train, Nov. 2, severely injuring the motorman and three passengers.

CHICAGO, ILL.—A peculiar accident happened on the State Street cable line Oct. 26. A cable train consisting of a grip car, an ordinary trailer and an electric motor car run as a trailer, when going at full speed, struck an obstruction in the slot at a switch just south of Madison Street. The shock telescoped the grip car and first trailer. Seven persons were injured.

CHICAGO, ILL.—The Paige Iron Works' plant at this place was destroyed by fire Oct. 27. The company will rebuild the plant as soon as insurance matters can be adjusted, and its numerous contracts will be filled as promptly as possible consistent with the delay. The temporary offices of the concern will be at 33 Ontario Street, just across the street from their property, and at 11 Fifth Avenue.